

# **CHAPTER IV**

## **REGIONALS/COMMUTERS**

For purposes of the Federal Aviation Administration (FAA) forecasts, air carriers that are included as part of the regional/commuter airline industry meet three criteria. First, a regional/commuter carrier flies a majority of their available seat miles (ASMs) using aircraft having 90 seats or less. Secondly, the service provided by these carriers is primarily regularly scheduled passenger service. Thirdly, the primary mission of the carrier is to provide connecting service for its code-share partners.

During 2004, 79 reporting regional/commuter airlines met this definition. Monthly traffic data for these carriers is compiled from the Department of Transportation's (DOT) Form 41 and T-100 filings. Smaller certificated and commuter carriers continue to file financial data using Form 298C.

### **REVIEW OF 2004<sup>1</sup>**

The positive results for the regional/commuter industry this year reflect a trend that commenced

with the events of September 11, 2001, was followed by the war in Iraq and Severe Acute Respiratory Syndrome (SARS), and further drawn out by the arrival of high oil prices. During this period, the regional/commuter carriers benefited from the continuing financial struggles of the mainline carriers as they shed capacity and turned over many thin routes to their code sharing regional/commuter partners. The failure of the legacy carriers to capture high business fares, in conjunction with their more costly pay structures, has made competition with the low-cost carriers difficult, at best.

The compression of mainline carrier fares is impacting the regional/commuter industry. In order to remain viable competitors, the legacy carriers have renegotiated with their regional affiliates lower "fixed fees per flight"

contracts and prorated fare bases for connecting flights. Although still registering strong revenues, the longer trip distances and renegotiated contracts has led to declining yields for the regional/commuter carriers.

As well, many of the mainline carriers negotiated a "relaxed" scope clause with their pilot unions. These clauses are agreements between mainline carriers and their regional affiliates that define the size and number of regional jets an affiliate may have and/or the amount of flying that the affiliate can undertake.

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<sup>1</sup>All specified years in this chapter are fiscal year (October 1 through September 30) unless otherwise designated.

The relaxation of these clauses has led to a shift in both the type and size of aircraft operated by the regional/commuter carriers. As recently as 2000, 75 percent of the regional/commuter fleet (over 2,200 aircraft strong) was composed of piston and turboprop aircraft. At present, over 50 percent of the regional/commuter fleet is comprised of jet aircraft with this percentage expected to grow to just under 75 percent by the end of 2016.

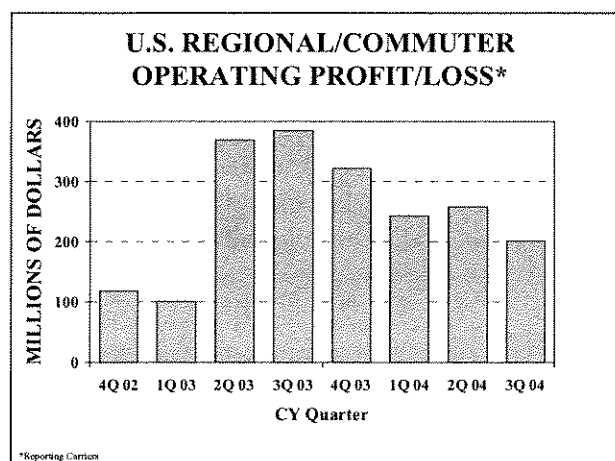
The relaxation of scope clauses is leading to a convergence of the U.S. airline fleet. The regional/commuter operators are moving toward larger jet aircraft (e.g. US Airways' order for Embraer 170 70-seat aircraft, and Independence Air's order for Airbus A-319 132-seat aircraft), while some of the large carriers are shifting toward smaller aircraft (e.g. Jet Blue's order for the Embraer 190 100-seat aircraft). This blending of the fleet is of note for both the users and providers of the national air transportation system. Increasing numbers of regional jets and smaller mainline equipment provides more choices for passengers but will add to congestion as more operations are required to move people.

To demonstrate how the mix of aircraft in the fleet is changing, an analysis of the Official Airline Guide (OAG) for Atlanta Hartsfield International (ATL), Chicago O'Hare International (ORD), and Dallas/Fort Worth International (DFW) was undertaken. A comparison of flights during the year 2000 at these airports shows that turboprop and piston powered aircraft accounted for 13.0 percent of commercial operations at ATL, 8.4 percent at ORD, and 26.3 percent at DFW. By 2004, scheduled commercial operations by turboprop and/or piston powered aircraft had declined to 5.4 percent at ATL and down to 6.3 percent at DFW. ORD no longer received scheduled commercial service from anything other than jet powered aircraft.

## FINANCIAL RESULTS

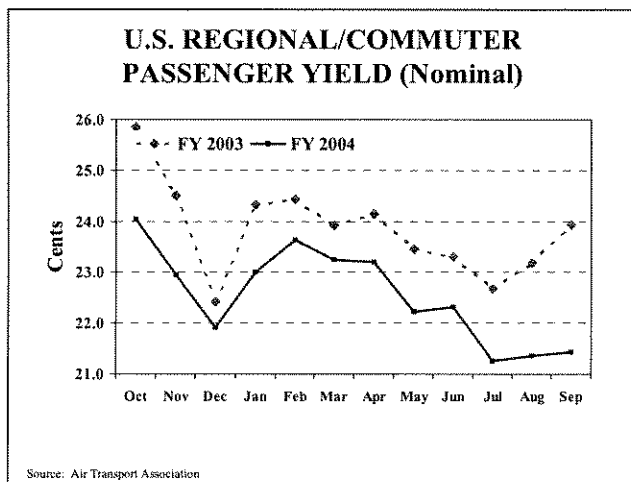
For the 12 months ended September 2004, the reporting regional/commuter carriers posted an operating profit of \$1.0 billion. The majority of the profits occurred during the October-December quarter of 2003. During this period, the carriers posted operating profits totaling \$321.8 million. Operating profits for fiscal year 2004 are 5.1 percent higher than those for fiscal year 2003.

The regional/commuter carriers have reported 11 consecutive quarters of operating profits (starting with January 2002 and going through September 2004). Prior to January 2002, the regionals/commuters reported four straight quarters of operating losses.



Operating revenues for fiscal year 2004 were \$11.2 billion, a 10.4 percent increase over the previous year. Operating expenses during the same period were \$10.2 billion, an increase of 7.8 percent over the previous year.

Nominal yield for a select group of the regional/commuter carriers during fiscal year 2004 was 22.5 cents. This is a decline of 5.8 percent from a yield of 23.8 cents during the previous 12-month period.



## SCHEDULED CAPACITY AND TRAFFIC

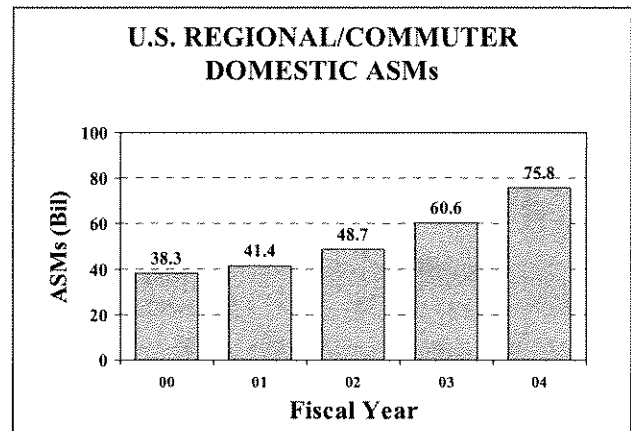
During 2004, system available seat miles (ASMs) increased 25.0 percent to 78.1 billion, while RPMs rose 31.2 percent to 53.1 billion. This resulted in the system load factor increasing by 3.2 points to 67.9 percent. System regional/commuter passengers totaled 128.9 million in 2004, 18.7 percent over 2003 levels. These carriers accounted for 18.7 percent of commercial enplanements in 2004, up from 11.9 percent in 2000 and 8.6 percent in 1991.

### Domestic Capacity and Traffic

The domestic regional/commuter database includes activity for all U.S. regionals/commuters operating in the 48 contiguous states, Alaska, Hawaii, Puerto Rico, and the U.S. Virgin Islands. It also includes transborder traffic into Canada.

### Available Seat Miles

Domestic scheduled U.S. regional/commuter ASMs are up 97.8 percent over the last 4 years, and up 25.1 percent in 2004 alone. During the 9-year period prior to 2001, domestic ASMs increased at an average annual rate of 10.1 percent.



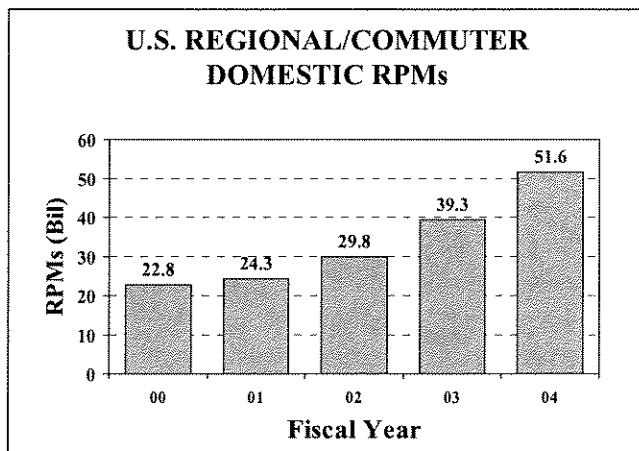
The large increase in domestic ASMs during 2004 is partly due to the continuing transfer of mainline carrier routes to their regional affiliates and code-share partners. During 2002 and 2003, the route transfers could be attributed to two unanticipated events that postponed the recovery of demand for mainline air carrier transportation services—the war in Iraq and SARS. However, during 2004, route transfers resulted as the legacy carriers struggled to survive in spite of high oil prices. Again the regionals/commuters benefited from mainline air carrier schedule reductions, demonstrating that financial struggles in the mainline air carrier industry are often met by strong results for the regionals/commuters.

### Revenue Passenger Miles

Domestic RPMs are up 126.0 percent over the last 4 years, and up 31.2 percent in 2004, totaling just under 51.6 billion. This compares to an average annual increase of 13.1 percent during the 9 years prior to 2001. The large growth in RPMs results from the same factors as

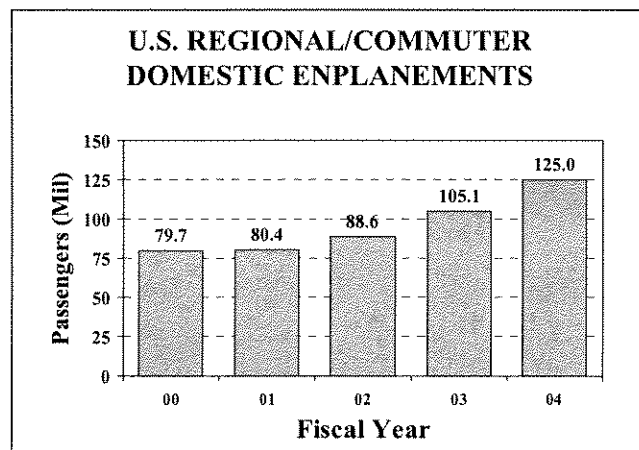
ASM growth, but is also partially due to the number of larger (50-90 seat) regional jet aircraft that have entered the fleet and the longer-haul routes that are being served by these aircraft.

The higher growth in RPMs relative to ASMs (31.2 percent vs. 25.1 percent) increased the domestic load factor 3.1 points to 68.0 percent in 2004. Since 1991, the regional/commuter load factor has increased 21.3 points, from 46.7 percent.



## Passenger Enplanements

From 1991-2000, domestic enplanements increased at an average annual rate of 7.9 percent. In 2004, domestic enplanements increased at over twice this rate (19.0 percent) to 125.0 million. Regional/commuter carriers accounted for 19.9 percent of total domestic enplanements in 2004, up from its share of 17.9 percent in 2003, and 12.4 percent in 2000.



The slower growth in passengers relative to RPMs during 2004 (19.0 versus 31.2 percent) is largely due to the fact that the average passenger trip length increased 38.4 miles. This, in part, reflects the longer stage length of the routes being transferred from the larger code-sharing partners and the addition of point-to-point routes that had not been previously served by regionals/commuters or mainline carriers. Since 2000, the average passenger trip length has increased 126.2 miles. The passenger trip length has increased over two fold since 1991, increasing from 185.9 miles to the current 412.7 miles.

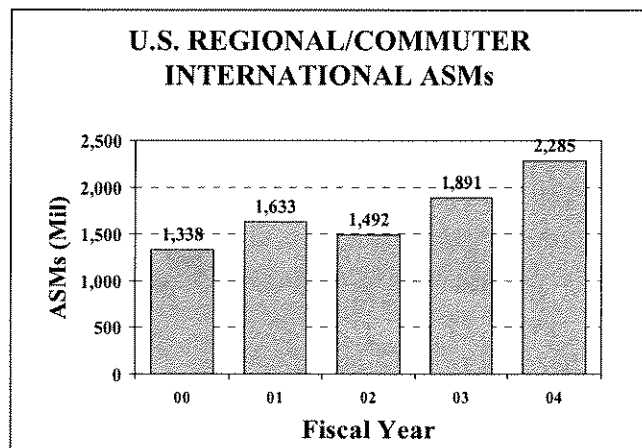
## International Capacity and Traffic

The international regional/commuter database includes activity between the United States or its territories, and the Caribbean and Mexico.

### Available Seat Miles

Regional/commuter international capacity accounts for only 2.9 percent of the total capacity flown by these carriers in 2004. For the year, scheduled international ASMs totaled 2.3 billion, an increase of 20.9 percent over 2003. Since 2000, the international ASMs flown by the regional/commuter carriers is up 70.8 percent. During the 9 years prior to 2001,

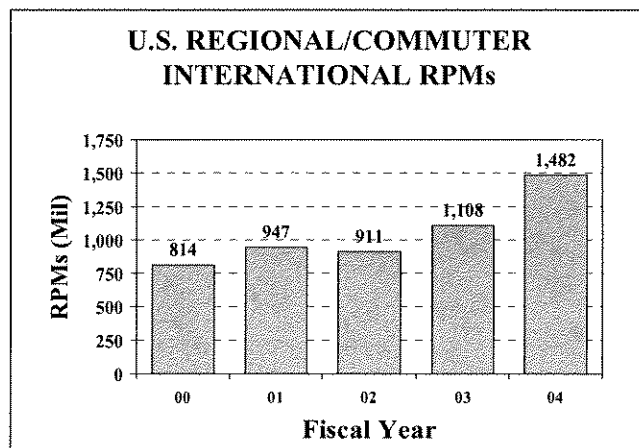
the average annual growth in international ASMs was 15.9 percent. The Official Airline Guide (OAG) indicates that almost 54.0 percent of the regional/commuter international ASMs are flown to Mexico destinations, up from 40.0 percent in 2003.



## Revenue Passenger Miles

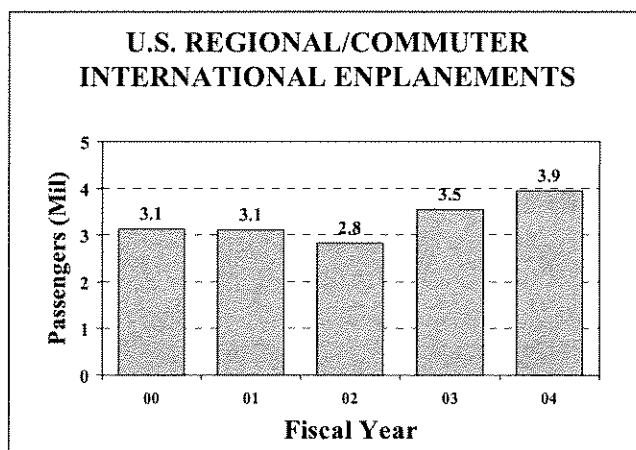
International RPMs for 2004 were up 33.8 percent to 1.5 billion. This compares to an average annual growth rate of 16.0 percent for the period 1991 through 2000. RPMs in the regional/commuter market have increased 82.1 percent since 2000.

The load factor in 2004 was 64.9 percent, up from a load factor of 60.8 percent posted in 2000. The highest load factor in the 9 years prior to 2001 occurred in 1997 (64.7 percent), and the lowest load factor occurred in 1995 (59.2 percent).



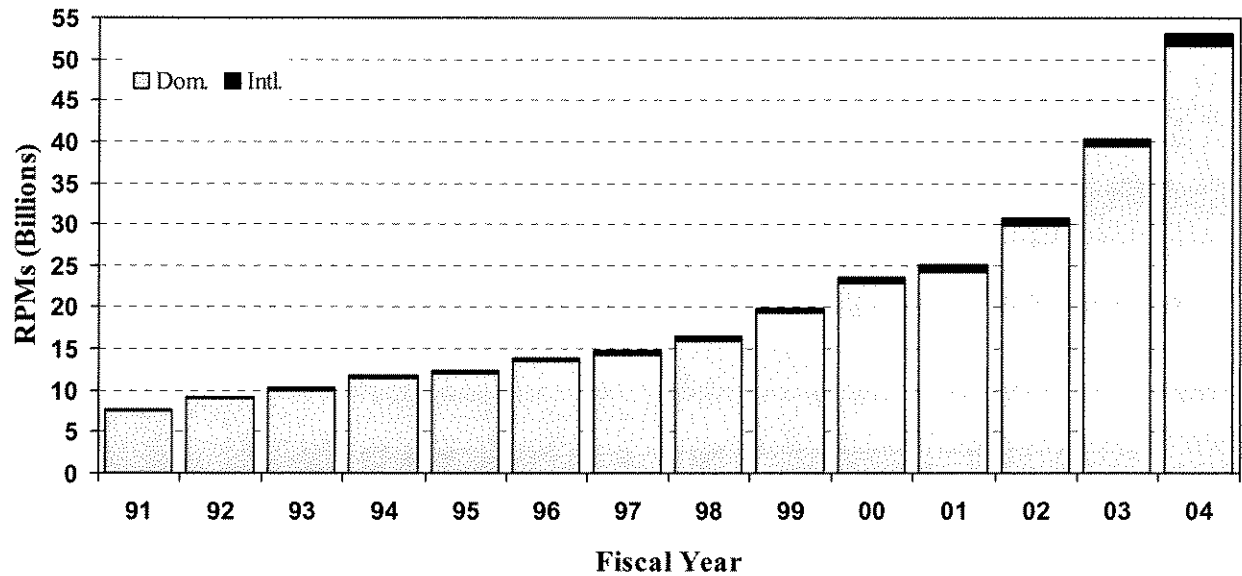
## Passenger Enplanements

International enplanements totaled 3.9 million in 2004, up 11.0 percent from the previous year. The average annual growth rate in international regional/commuter passengers for the period 1991-2000 was 12.1 percent. Between the end of 2000 and 2004, international passenger enplanements increased 25.8 percent.

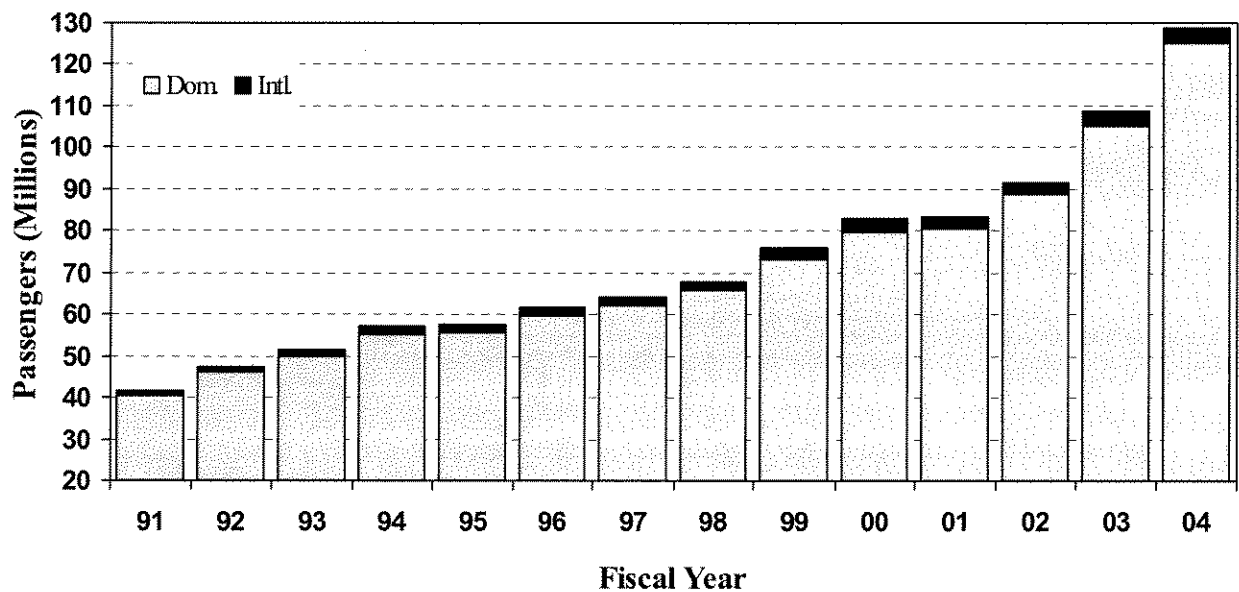


# U.S. REGIONALS/COMMUTERS TRAFFIC TRENDS

## Scheduled Revenue Passenger Miles



## Scheduled Passenger Enplanements



# **THE METAMORPHOSIS OF THE REGIONAL/COMMUTER INDUSTRY**

The fundamental character of the regional/commuter industry has changed significantly since the mid-1980s. These changes include the relative size and sophistication of airline operations, the carriers involved (especially the dominant industry operators), the aircraft fleet mix, and the industry's relationship with the mainline commercial air carriers.

While the overall number of regional/commuter airlines declined by over two-thirds between 1981 and 2004 (from 250 carriers to 79), one carrier started reporting traffic to the DOT for the first time during 2004—Valley Air Express.<sup>2</sup> It remains to be seen if the coming years will produce more start-up regional/commuter carriers that can fill the void left by the larger regional carriers as they abandoned shorter-haul markets in pursuit of longer-haul ones.

The large decline in the number of carriers over the past two decades results from several factors. First, the dramatic growth in the number of code-sharing agreements with the major air carriers (see Table IV-1 for a current listing of code-sharing agreements) has made it difficult for carriers without such agreements to effectively compete. Secondly, the air carrier acquisitions of or purchases of equity interest in their regional/commuter code-sharing partners has led to a reduction in the number of independent operators. Also, it is believed that the additional costs required to comply with the "one level of safety" commuter rule may have caused some regional/commuter carriers to cease operations.

Today a large number of regionals are owned, totally or in part, by their larger code-sharing partners, and still others are owned by other regionals. Ten regionals are owned totally or in part by 6 of the larger commercial air carriers, and 2 others are owned by 2 other regionals. In 2004, US Airways subsidiaries Allegheny Airlines and Piedmont Airlines merged, and MidAtlantic launched operations. Also during 2004, Aloha Airlines spun off their subsidiary Aloha Island Air.

Corresponding to the shrinking number of regional/commuter carriers in the industry is the increasing share of traffic being flown by the dominant industry carriers. In 1981, the top five regional/commuter carriers accounted for only 20 percent of the passengers flown, and increased to 30 percent by 1991. By the end of 2004 the top five carriers were responsible for flying just under half of all passengers, while the top 10 carriers accounted for 75 percent of all passengers flying regional/commuter carriers.

The present composition of the regional/commuter airline industry is presented in Table IV-3. This table lists the top 20 corporate structures and their percentage share of 2004 industry enplanements, and more accurately reflects the level of industry consolidation and integration with the larger mainline carriers. In 2004, the top 5 corporate groups accounted for 58.5 percent of industry enplanements, the top 10 for 83.3 percent, and the top 20 for 97.8 percent.

The introduction of the regional jet into the dynamics of the demand for air transportation services has expanded the role of the regional/commuter industry. The success operating carriers have experienced in markets where the aircraft is deployed has led to its operators moving beyond the boundaries of traditional regional/commuter markets. The regional jets' range and speed has opened up new opportunities, allowing carriers to serve longer-haul markets and to by-pass congested hub airports by providing point-to-point service.

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<sup>2</sup>Valley Air Express currently flies between Henderson, Nevada and Victorville, California.

**TABLE IV-1****AIR CARRIER/COMMUTER AIRLINES  
CODE-SHARING AGREEMENTS****AS OF DECEMBER 2004**

<b>Air Carrier/Program Name</b>	<b>Designated Carrier</b>	<b>Primary Hubs Served</b>
1. Alaska Airlines	Big Sky Airlines ERA Aviation Horizon Air Peninsula Airways	Seattle Anchorage Portland, Boise, Spokane, Eugene Anchorage
2. Aloha Airlines	Aloha Island Air	Honolulu
3. America West Express	Air Midwest Big Sky Airlines Mesa Airlines	Phoenix Billings Phoenix
4. American Airlines	American Eagle Airlines  Executive Airlines	Chicago O'Hare, Dallas/Fort Worth, Boston, Los Angeles, New York/LGA Miami, San Juan
5. American Connection	Chautauqua Airlines Corporate Express Airlines Trans States Airlines	St. Louis St. Louis St. Louis
6. American Trans Air	Chicago Express	Chicago Midway
7. Continental Airlines	American Eagle ExpressJet  Horizon Air	Los Angeles Cleveland, Houston Intercontinental, New York/Newark Portland, Seattle
8. Continental Connection	Cape Air CommutAir Gulfstream International SkyWest	Tampa Albany, Cleveland Fort Lauderdale, Miami Houston Intercontinental
9. Delta Connection	American Eagle Atlantic Southeast Airlines Chautauqua Airlines Comair SkyWest	Los Angeles Atlanta, Dallas/Fort Worth Dallas/Fort Worth, Columbus Cincinnati, Atlanta, New York/LGA Salt Lake City, Dallas/Fort Worth



**TABLE IV-1 (Continued)**

**AIR CARRIER/COMMUTER AIRLINES  
CODE-SHARING AGREEMENTS**

**AS OF DECEMBER 2004**

<b>Air Carrier/Program Name</b>	<b>Designated Carrier</b>	<b>Primary Hubs Served</b>
10. Frontier Airlines	Great Lakes Aviation Horizon Airlines	Denver Denver
11. Hawaiian Airlines	Horizon Airlines	Portland/Seattle
12. Midwest Express	Skyway Airlines	Milwaukee, Kansas City
13. Northwest Airlines	American Eagle Big Sky Airlines Continental Express  Gulfstream International Horizon Airlines Mesaba  Pacific Island Aviation Pinnacle Airlines	Los Angeles Billings, Bismarck Cleveland, Houston Intercont'l., New York/Newark Miami, Ft. Lauderdale, Tampa Portland, Seattle Detroit Metro, Minneapolis/St. Paul, Memphis Guam Detroit Metro, Minneapolis/St. Paul, Memphis, Milwaukee, Indianapolis
14. United Express	Air Wisconsin Chautauqua Great Lakes Aviation Gulfstream International Mesa Airlines Republic Shuttle America SkyWest Airlines  Trans States	Washington Dulles, Chicago O'Hare Chicago O'Hare, Washington Dulles Denver Miami Denver Chicago O'Hare, Washington Dulles Dulles Chicago O'Hare, Denver, Los Angeles, San Francisco Chicago O'Hare, Washington Dulles
15. US Airways Express	Air Midwest Chautauqua Colgan Air, Inc. Mesa MidAtlantic Piedmont PSA Trans States	Kansas City, Pittsburgh New York/LGA, Pittsburgh New York/LGA, Pittsburgh Charlotte, Philadelphia Pittsburgh Charlotte, Philadelphia Charlotte, Washington National Baltimore, Pittsburgh

TABLE IV-2

**TOP 50  
REGIONAL/COMMUTER AIRLINES  
RANKED BY TOTAL PASSENGER ENPLANEMENTS**

**FISCAL YEAR 2004  
(IN THOUSANDS)**

<b>Carrier</b>	<b>Enplanements</b>	<b>Carrier</b>	<b>Enplanements</b>
1. American Eagle	14,012.8	26. ERA Aviation	362.9
2. ExpressJet	13,089.9	27. Aloha Island	354.9
3. SkyWest	12,785.7	28. Eagle Canyon Airlines	291.2
4. Comair	12,486.4	29. Great Lakes Aviation	251.4
5. Atlantic Southeast	9,924.4	30. Cape Air	231.2
6. Mesa	8,796.9	31. Peninsula Airways	195.7
7. Atlantic Coast Airlines*	7,568.7	32. Corporate Airlines	148.5
8. Air Wisconsin	6,929.2	33. Caribbean Sun Airlines	144.2
9. Pinnacle	5,999.7	34. Seaborne Aviation	137.0
10. Chautauqua	5,669.1	35. Hageland Aviation	132.6
11. Horizon	5,625.8	36. Frontier Flying Service	129.0
12. Mesaba	5,483.2	37. Big Sky Airlines	92.2
13. Trans States	3,047.6	38. Kenmore Air Harbor	67.3
14. Executive	2,680.2	39. Pacific Island Air	66.8
15. Piedmont	2,412.7	40. Grant Aviation	66.0
16. PSA	1,768.0	41. Bering Air	60.0
17. Allegheny	1,350.4	42. Flying Boat	56.0
18. Chicago Express	1,098.1	43. Pacific Wings	55.2
19. Skyway	756.1	44. West Isle Air	39.5
20. Gulfstream International	646.9	45. Warbelows Air Ventures	34.8
21. Freedom Airlines	637.7	46. Wings of Alaska	33.4
22. Air Midwest	601.2	47. Cape Smythe Air Service	29.7
23. Shuttle America	580.3	48. Promech	26.2
24. Colgan Air	579.3	49. Vintage Props and Jets	23.0
25. CommutAir	440.9	50. Boston Maine Airways	21.6
<b>Top 25: % of Total Regional/ Commuter Enplanements</b>	<b>97.5%</b>	<b>Top 50: % of Total Regional/ Commuter Enplanements</b>	<b>99.9%</b>

Source: DOT Form 41 and FAA Estimates

\*Includes enplanements for Independence Air.

**TABLE IV-3**  
**TOP 20 CORPORATE STRUCTURES**  
**FISCAL YEAR 2004**

<b>Carrier/ Carrier Group</b>	<b>Industry Enplanements (%)</b>	<b>Carrier/ Carrier Group</b>	<b>Industry Enplanements (%)</b>
1. Delta	17.5	11. Mesaba	4.4
2. American Eagle	13.0	12. US Airways Express	4.3
3. ExpressJet	10.2	13. Trans States	2.4
4. SkyWest	10.0	14. Chicago Express	0.9
5. Mesa	7.8	15. Skyway/Astral Aviation	0.6
<b>Top 5: % of Total Regional/ Commuter Enplanements</b>	<b>58.5%</b>	<b>Top 15: % of Total Regional/ Commuter Enplanements</b>	<b>95.8%</b>
6. Atlantic Coast	5.9	16. Gulfstream International	0.5
7. Air Wisconsin	5.4	17. Shuttle America	0.5
8. Pinnacle	4.7	18. Colgan Air	0.5
9. Chautauqua	4.4	19. CommutAir	0.3
10. Horizon	4.4	20. ERA Aviation	0.3
<b>Top 10: % of Total Regional/ Commuter Enplanements</b>	<b>83.3%</b>	<b>Top 20: % of Total Regional/ Commuter Enplanements</b>	<b>97.8%</b>

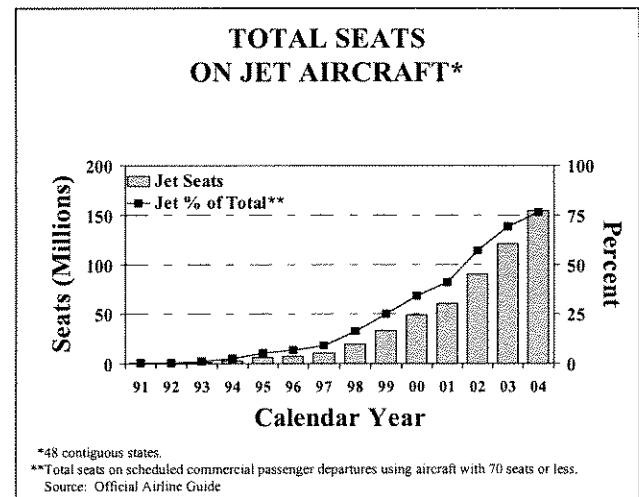
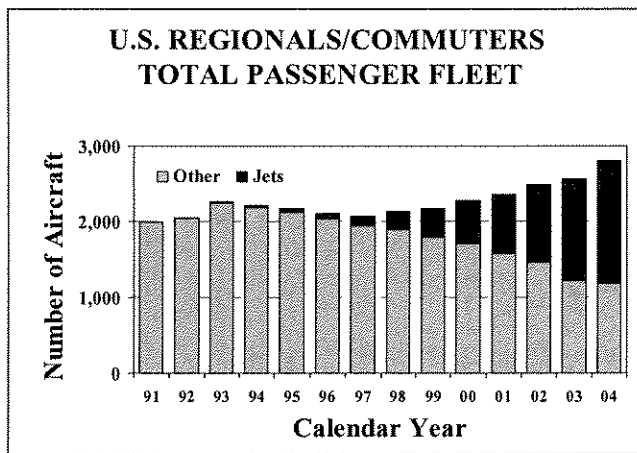
Source: DOT Form 41 and FAA Estimates

Prior to the events of September 11<sup>th</sup>, scope clauses prevented many of the regional/commuter carriers from operating anything larger than the 50-seat regional jet. However, the relaxation of scope has led to more of the larger regional jet aircraft entering the fleet. OAG analysis indicates that 3 carriers operated the 70-seat regional jet in 2002 (American Eagle, Mesa, and Atlantic Southeast); another 4 carriers began operating the 70-seaters in 2003 (Horizon, Freedom Air, Comair, and Air Wisconsin); and by 2004, an additional 5 carriers (MidAtlantic, SkyWest, Trans States, Chautauqua, and PSA) were operating the 70-seat aircraft. At present, Mesa Airlines is the only carrier operating Bombardier's CRJ900. It is anticipated that most regional jets entering the fleet over the next few years will be in the 70-90 seat range.

In last year's forecast document, the FAA analyzed 13 years (1991-2003) of schedules from the OAG to assess the growing impact of regional jets on the industry. This analysis has been updated to include data for 2004 and is presented below.

## FLEET COMPOSITION

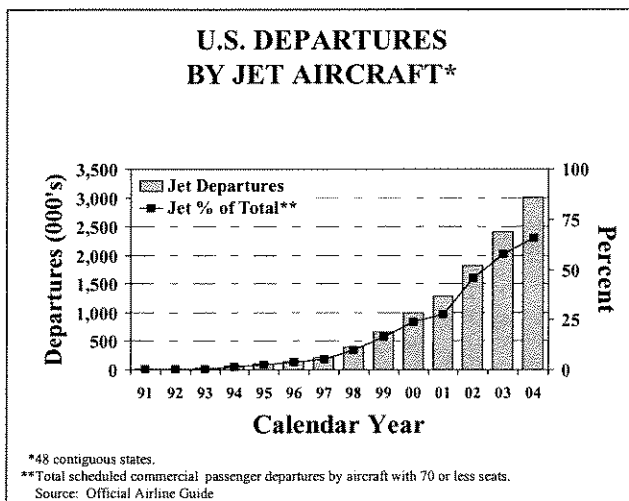
In 1991, three regional/commuter air carriers operated a total of 20 jets, accounting for 1.0 percent of the total fleet and 4.0 percent of seats offered for sale. It was not until 1997 that the introduction of the regional jets started to accelerate, growing from 132 aircraft to 1,630 aircraft in 2004.



## Activity and Operational Measures

The number of scheduled regional/commuter jet departures in the 48 contiguous states has grown from just under 9,100 in 1991 to over 3.0 million in 2004. In 2004, jet departures by regionals/commuters accounted for 65.8 percent of the industry departures, up from just 0.2 percent in 1991. In 2004 alone, regional jet departures increased 24.9 percent from 2.4 million to 3.0 million.

Jet aircraft have also penetrated the transborder markets. In 1992, less than 1.0 percent of all regional/commuter flights between the United States and Canada were flown with jet aircraft. In 2004, jets flew 65.2 percent of regional/commuter flights between the two countries. These 73,967 flights provided 3.7 million seats, and accounted for over 74.0 percent of regional/commuter seat capacity between the United States and Canada. Since 2003, jet flights and seats in this market increased 10.3 and 11.3 percent respectively.

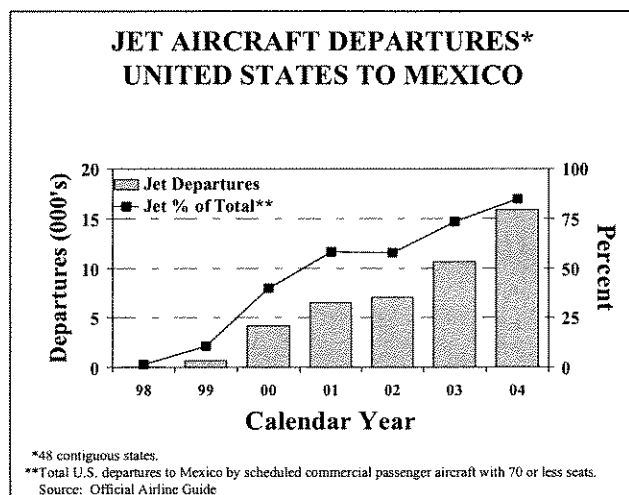


Regional jets accounted for 76.4 percent of regional/commuter seats in 2004. Seat capacity provided by these type of aircraft increased 27.3 percent from 2003, for an additional 33.1 million seats.

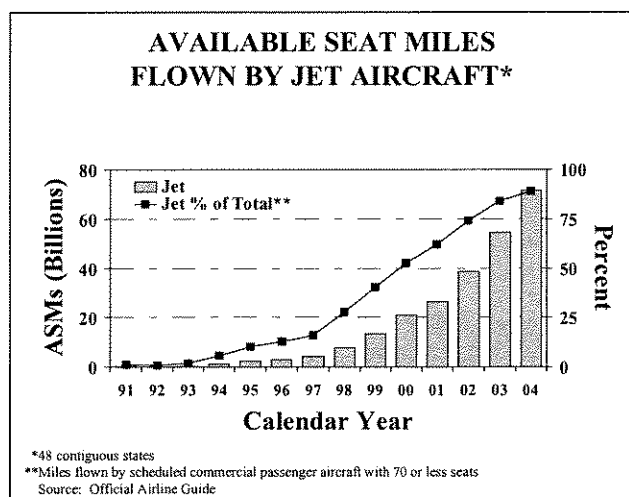


In 2004, 7 years after the introduction of jet service into Mexico, regional/commuter carriers flew over 15,878 jet flights between Mexico and the United States, accounting for 84.8 percent of all regional/commuter flights in these markets. In addition, during 2004 jet seat capacity increased by just over 256,380 seats. By year-

end, 88.9 percent of regional/commuter seat capacity between the United States and Mexico was flown by jet aircraft.

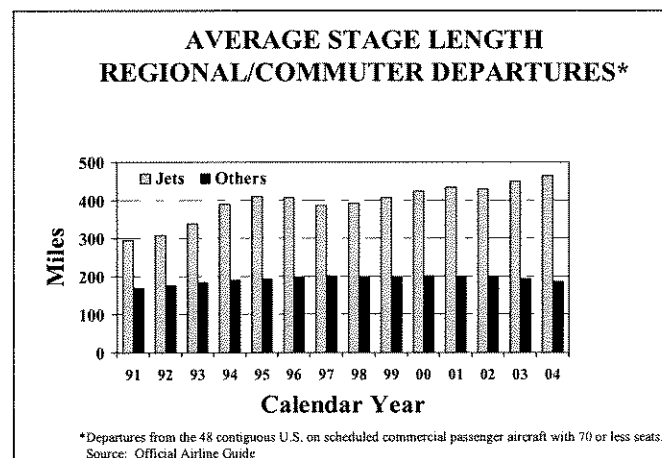


With their higher cruise speed and longer range capabilities, the ASMs flown by jet aircraft are also increasing rapidly, from just 0.9 percent of total industry ASMs flown in 1991 to 90.0 percent in 2004. Between 2003 and 2004, the ASMs flown by jet aircraft increased 31.8 percent.



The growth in ASMs flown is indicative of regional jets operating on routes significantly longer, on average, than “traditional” regional/commuter routes. Between 1994 and 1999, following the introduction of the 50-seat regional jet, the average stage length flown by regional jets hovered at 400 miles. Between 2000 and 2004, the stage length steadily

increased to 463.9 miles. By comparison, the average stage length for piston and turboprop regional/commuter aircraft during 2004 was 186.4 miles.

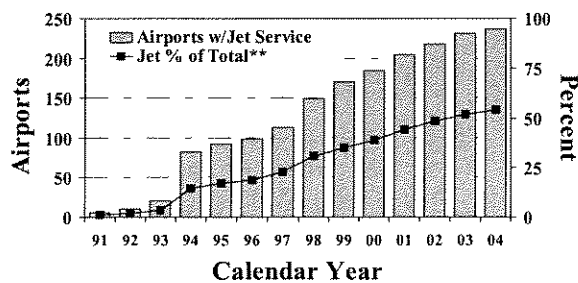


## MARKETS/ROUTES SERVED

Regional jets provide the flying public with significantly more travel options. As greater numbers of Bombardier and Embraer regional jets enter the fleet, more small- and medium-sized hubs are receiving jet service for the first time. Consequently, the number of airports and city-pairs benefiting from jet service are at an all-time high. At the same time many airports served by turboprop aircraft are losing service.

The number of U.S. airports receiving regional/commuter jet service increased from only 6 in 1991 to 237 in 2004. As a result, 54.0 percent of the airports served by regional/commuter carriers receive jet service, up from 1.1 percent of the airports in 1991. At present only two states, Hawaii and Alaska, are not served by regional jets.

### U.S. AIRPORTS SERVED BY JET AIRCRAFT\*



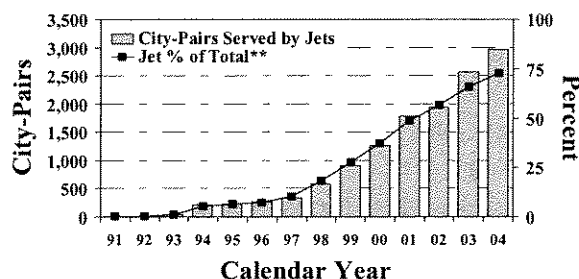
\*48 contiguous states.

\*\*Total airports with scheduled commercial passenger service by aircraft with 70 or less seats.  
Source: Official Airline Guide

The number of airports in Canada and Mexico served by regional jets continued to increase in 2004. In 2004, regional jets flew to 13 Canadian airports from the United States, up from just 2 airports in 1992. In Mexico, 26 airports are served by regional jets from the U.S.; up from only one airport in 1998.

The number of city-pairs originating from airports in the U.S. has also increased significantly. Regional/commuter city-pairs with jet service grew from 10 in 1991 to 2,969 in 2004. In 2004 alone, an additional 398 city-pairs received regional/commuter jet service, raising the percentage of regional/commuter city-pairs with jet service to over 72.7 percent.

### CITY-PAIRS SERVED BY JET AIRCRAFT



\*48 contiguous states.

\*\*Total city-pairs with scheduled commercial passenger service by aircraft with 70 seats or less.  
Source: Official Airline Guide

Of the 2,969 city-pairs served by regional jets in 2004, 112 were flown in international service. Between the United States and Canada, regional jets served 72 of 111 regional/commuter city-pairs. Between the United States and Mexico, 40 out of 47 city-pairs were served by regional jets.

## TOP 10 REGIONAL/COMMUTER AIRPORTS

The top ranked airport in 2004 with respect to regional jet departures was Chicago O'Hare International (ORD). Scheduled regional jet departures at ORD totaled 194,953 in 2004. ORD did not have scheduled service with turboprop or piston aircraft during this period. Forty-one percent of all commercial departures at ORD (mainline air carrier and regional/commuter) were performed by regional jet aircraft.

Cincinnati/Northern Kentucky International (CVG), ranked second to ORD, with a total of 170,702 regional jet departures. Dallas/Fort Worth (132,550), Atlanta Hartsfield (124,101), and Dulles International (120,127) round out the list of the top five airports with scheduled jet service from regional/commuter carriers. Dulles International and Salt Lake City International Airport moved into the Top 10 list during 2004, displacing Boston Logan International and New York La Guardia.

Regional jet departures at the top 10 ranked regional/commuter airports accounted for 88.7 percent of total regional/commuter departures and 41.2 percent of total commercial departures at these 10 airports. In the 48 contiguous states, commuter jet departures accounted for 65.4 percent of all regional/commuter departures and 30.4 percent of all commercial departures during 2004. (See Table IV-4.)

**TABLE IV-4**  
**TOP 10 AIRPORTS**  
**RANKED BY COMMUTER JET DEPARTURES**  
**CALENDAR YEAR 2004**

ID	Airport	Departures			Regional Jet Departures as a % of Total Commuter Departures	Regional Jet Departures as a % of Total Commercial Departures
		Commuter*		Commercial**		
		Jet	Total	Total		
1. ORD	Chicago O'Hare Int'l.	194,953	194,953	480,581	100.0	40.6
2. CVG	Cincin./N. Kentucky. Int'l.	170,702	174,733	233,820	97.7	73.0
3. DFW	Dallas/Fort Worth Int'l.	132,550	155,643	386,496	85.2	34.3
4. ATL	William B. Hartsfield Int'l.	124,101	147,769	470,780	84.0	26.4
5. IAD	Dulles International	120,127	137,405	196,419	87.4	61.2
6. IAH	Houston Intercontinental	99,297	110,450	241,243	89.9	41.2
7. EWR	Newark Int'l.	79,057	79,453	200,352	99.5	39.5
8. DTW	Detroit Metro Wayne	67,566	95,706	247,844	70.6	27.3
9. CLE	Cleveland-Hopkins Int'l.	67,431	80,883	115,886	83.4	58.2
10. SLC	Salt Lake City Int'l.	64,863	86,292	146,522	75.2	44.3
	Departures – Top 10	1,120,647	1,263,287	2,719,943	88.7	41.2
	Total Departures – 48 U.S.	3,049,413	4,660,945	10,041,828	65.4	30.4

\*Scheduled Commercial Passenger Aircraft with seat size  $\geq 3$  and  $< 71$

\*\*Scheduled Commercial Passenger Aircraft with seat size  $\geq 3$

Source: Official Airline Guide published December 2004

## INDUSTRY IMPACT

The past several years have witnessed the rapid development of routes utilizing regional jets, much to the increasing satisfaction of most of the traveling public. However, even with the high traffic growth experienced by the regional/commuter industry, there is still an erosion in the number of shorter-haul city-pairs receiving non-stop regional/commuter service.

The decline in service to shorter-haul markets may be the result of two factors. First, in 1995 an initiative was enacted to bring all air carriers operating aircraft with a capacity between 10 and 30 seats under the same operating rules as those carriers with large aircraft. The initiative called for “one level of

safety” and placed stringent safety standards on regional/commuter carriers. The additional costs required to meet the increased safety standards made some smaller aircraft uneconomical to operate. In March of 1997, the initiative became law and is now known as the “commuter rule.”

One year after the implementation of the commuter rule (1998), the number of city pairs served by the regional/commuter carriers fell to its lowest level of the decade. Although the trend reversed in 1999 as more regional jets entered the fleet, the number of short-haul markets served (200 miles or less) continues to decline. According to the OAG, between 2001 and 2004, 456 city-pairs in the 0-199 mile range, and 248 city pairs in the 200-499 mile range lost nonstop regional/commuter service (air carrier

service is not offered either). While there have been additional new city-pairs offered in these ranges (316 pairs in the 0-199 mile range, and 158 pairs in the 200-499 mile range), the overall impact is a net loss of 184 and 90 city-pairs, respectively.

The second factor affecting service in short-haul markets is that it is more economical for regional jet aircraft to operate in denser passenger markets. As more regional jet aircraft enter the fleet, the average stage length will rise as carriers pursue markets that are more suitable for the regional jet aircraft to operate in.

Again, analysis of the OAG for the years 2001 and 2004 demonstrates this effect. In 2001, the regionals were flying 699 city-pairs with mileage over 499 miles, with 321 of these pairs served exclusively by regionals/commuters. By 2004 the number of city-pairs served by regional/commuter carriers grew almost two-fold--to 1,363 city pairs--with 700 city-pairs served exclusively by regionals/commuters. Also, it is interesting to note that 333 of these markets were recipients of point-to-point service that had not previously been served by either regionals/commuters or large air carriers. (See Table IV-5 for a comparison of city-pairs served by regional/commuter and large air carriers.)

Presently, there are 5,775 city-pairs being flown non-stop in the 48 contiguous states by regionals/commuters and/or large air carriers, 56 less pairs than were available in 2001. Of these 5,775 city-pairs, 1,020 were new (not available since at least 2001). Additionally, 1,079 city-pairs have lost non-stop service altogether since 2001.

The changing mix of the regional/commuter aircraft fleet is also affecting service on longer-haul routes. From 2001 to 2004 the number of city-pairs being flown in the range above 1,000 miles increased dramatically. In 2001, only 34 city-pairs posted stage lengths greater than 1000 miles---the longest distance

measuring 1,148 miles (New York La Guardia/Dallas Love Field). By 2004, there were 174 city-pairs flying beyond 1,000 miles with the top distance registering 1,495 miles (Austin/San Francisco). It is anticipated that as more of the larger regional jets enter the fleet, stage lengths will continue to rise.

To corroborate the major shift in the stage lengths being flown by the regional/commuter carriers, one year prior to the "one level of safety" initiative (1994), 3,794 city-pairs were being flown. Out of these 3,794 city-pairs, 82 percent of them measured distances less than 300 miles. The year the "commuter rule" was enacted (1997), shorter-haul city-pairs represented only 77 percent of the pairs flown. Six years later, at the end of 2004, only 42.5 percent of the city-pairs being flown by regionals/commuters are less than 300 miles, a 34.5 percentage point drop from the number of city-pairs flown during 1997.

## **RISKS AND UNCERTAINTIES**

As the regional/commuter carriers continue carrying a larger share of the passengers in the system, they are confronted with old issues as well as new. Maintaining cost structure, operating within the confines of scope clauses, and managing airspace and airport congestion continue to be concerns.

The ability of regional carriers to maintain their cost structure is fundamental for their appeal to the larger air carriers. The goal of network carriers is to gain feed from the regionals while providing seamless service to their customers.

However, the increased competition from low-cost carriers has forced network carriers to further reduce costs in order to remain competitive. This directly impacts the



TABLE IV-5

**CITY PAIR ANALYSIS  
FOR SCHEDULED U.S. FLAG PASSENGER CARRIERS\*  
DEPARTING/ARRIVING IN THE CONTINENTAL UNITED STATES  
CALENDAR YEARS 2001 AND 2004**

**City Pairs\*\* With Non-Stop Service -- by Aircraft Category**

Stage Length (Miles)	0-200	200-500	500 plus	Total Pairs
<b>2001</b>				
Regionals/Commuters	1,309	1,456	699	3,464
Large Air Carriers	298	957	2,234	3,489
System	1,390	1,886	2,555	5,831
<b>2004</b>				
Regionals/Commuters	1,010	1,539	1,363	3,912
Large Air Carriers	201	789	2,246	3,236
System	1,044	1,785	2,946	5,775
<b>Difference between 2001 and 2004</b>				
Regionals/Commuters	(299)	83	664	448
Large Air Carriers	(97)	(168)	12	(-253)
System	(346)	(101)	391	(-56)

**City Pairs Served Exclusively by Regionals/Commuters or Large Air Carriers**

Stage Length (Miles)	0-200	200-500	500 plus	Total Pairs
<b>2001</b>				
Regionals/Commuters	1,092	929	321	2,342
Large Air Carriers	81	430	1,856	2,367
Jointly Served	217	527	378	1,122
<b>2004</b>				
Regionals/Commuters	843	996	700	2,539
Large Air Carriers	34	246	1,583	1,863
Jointly Served	167	543	663	1,373
<b>Difference between 2001 and 2004</b>				
Regionals/Commuters	(249)	67	379	197
Large Air Carriers	(47)	(184)	(273)	(504)
Jointly Served	(50)	16	285	251

**Change in City Pairs Served by Commercial Air Carriers Between 2001 and 2004**

Stage Length (Miles)	0-200	200-500	500 plus	Total Pairs
<b>City Pairs Gained/Lost (not served by either category since '01)</b>				
Gained-Regional/Commuter City Pairs	140	158	333	631
Gained -- Large Air Carrier City Pairs	10	34	345	389
Lost - Regional/Commuter City Pairs	456	248	95	799
Lost -- Large Air Carrier City Pairs	60	51	169	280
<b>Net Change in City Pairs</b>				
Gained	150	192	678	1,020
Lost	516	299	264	1,079
Net Gain/(Loss)	(366)	(107)	414	(59)

Source: Federal Aviation Administration Flight Service Data System (FSDS)

\*Regionals/Commuters: flights operated using aircraft with 70 or less seats.

Large Air Carriers: flights operated using aircraft with more than 70 seats.

\*\*For example, LAX/ORD counts as two city pairs.

regional/commuter carriers since they must also cut costs in order to remain profitable, especially in an environment of less lucrative “fees for departure” contracts and reductions in prorated fares.

Scope clauses define routes and services that mainline airlines may subcontract to the regionals. They can place limits on the size and number of aircraft operated by regional airlines, and/or the number of ASMs flown by a regional carrier. The events of September 11<sup>th</sup> accelerated the relaxation of these clauses, but they can still remain a barrier to matching the right-sized aircraft to market demand.

While the terrorist attacks of September 11<sup>th</sup>, the war in Iraq, and SARS temporarily sidelined the issue of airport congestion, it has reappeared with the return of traffic to pre-September 11<sup>th</sup> levels at a number of U.S. airports. As demand recovers at more airports, aviation professionals are increasingly concerned that the rising numbers of regional jets and smaller mainline equipment operating in the U.S. will exacerbate airport and airspace congestion. Unlike turboprop aircraft that operate most efficiently at altitudes half that of the regional jets, regional jet aircraft operate most efficiently and economically in airspace shared with the larger jet aircraft. Consequently, the replacement of turboprop aircraft by regional jet aircraft increases congestion in airspace previously used only by large jet aircraft. It is believed that technology and scheduling improvements will help alleviate some of the congestion that may arise.

## **FORECAST METHODOLOGY**

In normal times, regional/commuter demand is modeled using economic assumptions as inputs. However, the role of regional/commuter carriers

in the national transportation system has expanded, thus making economic models misleading, at least in the short-term. Current models underestimate the amount of traffic being carried by the regional/commuter carriers and fail to capture the anticipated growth in capacity expected to occur during the early years of the forecast period.

The starting point for developing regional/commuter capacity for 2005 was the flight schedules published in the December 2004 OAG. The year-over-year change in the scheduled capacity for the first 8 months of 2005 was extrapolated using seasonal trends to account for the remaining months of the fiscal year. To prepare traffic forecasts, insight gained from discussions held with individual carriers, trade associations, manufacturers, and industry analysts from the Transportation Research Board (TRB) Regional/Commuter Subcommittee meetings were taken under consideration, along with emerging trends in average trip lengths and load factors. Using this information, forecasts for RPMs and passengers were developed.

These preliminary estimates of supply and demand were compared with actual capacity and traffic data from trade publications and carrier web sites and adjusted as necessary. Although the forecasts for 2005 contain numerous assumptions developed from expert opinion and analyst expertise, it is believed that the forecasts are reasonable in terms of capturing the anticipated course of events.

To combat the failure of economic models to capture the effects of the large number of regional jets projected to enter the fleet, an alternative method for forecasting traffic was pursued. Forecasts for the period beyond 2005 are a blend of economic models, assumptions regarding capacity, and traditional information regarding average passenger trip length.

For the period beyond 2005, initial estimates for RPMs and enplanements were based on an economic model that assigned Gross Domestic Product (GDP) as the independent variable. Load factor assumptions were then used to derive a forecast for capacity. These three forecasts were labeled the “base case”. As expected, based on published information for orders and options of regional jet aircraft, the “base case” model appeared to underestimate the capacity increases expected to occur during the early years of the forecast. Therefore, projected orders and options for regional jet aircraft were used to forecast capacity for the regional/commuter carriers in 2006 and 2007. To complete the forecasts for the 2007-2016 period, conventional assumptions regarding load factor, average trip length and seat size were used to estimate passengers and miles flown.

## **FORECAST ASSUMPTIONS**

Currently, individual air carriers are categorized as either regional/commuter *or* mainline air carrier, with the regionals defined as those carriers flying most of their ASMs using aircraft having 90 seats or less. Separate capacity and traffic forecasts are prepared for the regionals/commuters based on type of travel--domestic or international. Domestic forecasts include travel between the United States, its territories and Canada. International forecasts are based on travel between the United States and its territories and Mexico and the Caribbean.

Development of the regional/commuter international database required several sources including: DOT Form's 298C (Table 11A), 41, and T100 as well as the Official Airline Guide. Prior to fiscal year 2003, 298C carriers only reported RPMs and enplanements on Table 11A, therefore the Official Airline Guide was used to

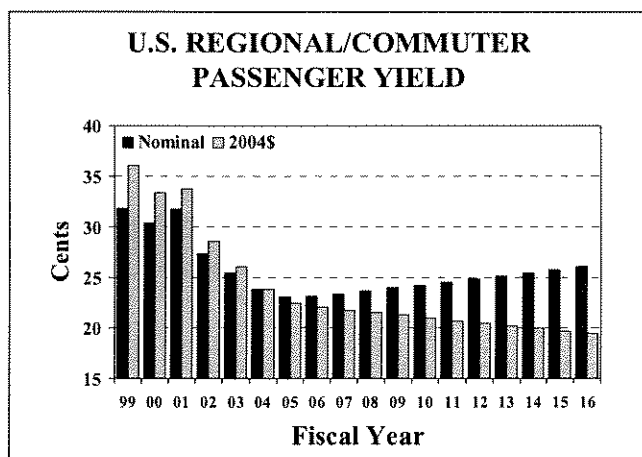
backfill history for ASMs, miles flown, seats, and departures for these carriers. Also, not all carriers offering international service report domestic traffic separately from international on Form 41. For these carriers, DOT T100 data was used to obtain international traffic counts. This international traffic was subtracted from the system traffic to arrive at "pure" domestic traffic.

The baseline assumptions for passenger yield, average aircraft seat size, and passenger trip length are presented in tabular form in Chapter X, Table 26.

## **PASSENGER YIELD**

The nominal passenger yield for the reporting regional/commuter air carriers was 23.8 cents in 2004, down 6.4 percent from 2003. Prior to September 11<sup>th</sup>, regional/commuter yields generally averaged 30 cents or more. Despite the large decline in yield over the past several years, regional/commuter carriers still post yields that are more than double that of the larger air carriers (11.46 cents in 2004).

Several factors are responsible for the drop in nominal yield since September 11<sup>th</sup>. In 2004, regional/commuter carriers not only faced increased competition from low-cost carriers, but also less lucrative “fees for departure” and pro-rated fare contracts with the network carriers. As well, purchases of higher-fare tickets declined, cutting into revenues made by carriers that were not operating on a contract-flying basis. Also, contributing to the reduction in yields is the increased utilization of regional jets. The regional jets operate at higher load factors and longer passenger trip lengths, both contributing factors to stable or declining yields.



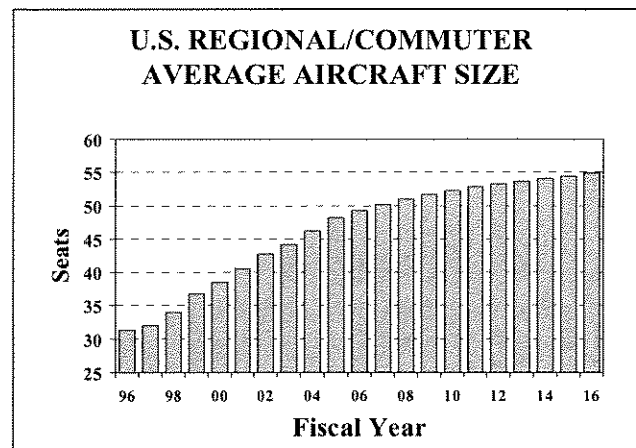
The nominal yield is expected to decline 3.1 percent in 2005, then increase by 0.4 percent in 2006 and 0.9 percent 2007. For the remaining years of the forecast, nominal yield is expected to rise at an average annual rate of 1.2 percent to 26.06 cents in 2016. The real yield is projected to decline by 5.7 percent in 2005, 1.8 percent in 2006, and 1.4 percent in 2007. For the remaining years of the forecast, the real yield is projected to decline at an average annual rate of 0.9 percent, falling to 19.48 cents in 2016.

## AVERAGE AIRCRAFT SIZE

The most significant change in fleet composition will result from the integration of large numbers of regional jet aircraft into the fleet, most of which occurs in the 50-70-90 seat category. These aircraft have already increased public acceptance of regional airline service, and offer the greatest potential for replacement service on selected jet routes.

The regional/commuter aircraft fleet is expected to continue to grow rapidly during the first several years of the forecast period. Average seats per aircraft is expected to increase by 1.9 seats in 2005, 1.1 seats in 2006, and 1.0 seats in 2007. For the period 2008-2016, seats per aircraft are projected to increase at an average rate of 0.5 seats annually, to 54.9 seats

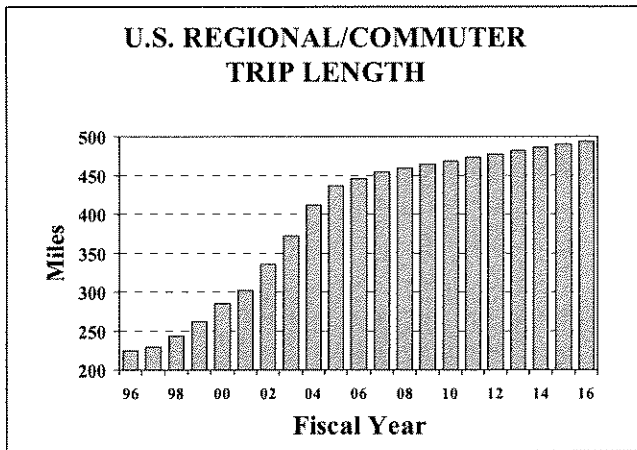
in 2016. Most of the growth in seat size is expected to come from those carriers operating the larger regional jets.



## PASSENGER TRIP LENGTH

The impact of the regional jet is reflected in the growth in the average passenger trip length. The introduction of regional jets in large numbers in 1997 coincides with the significantly higher growth in the average passenger trip length.

Over the next 3 years of the forecast, the average trip length is expected to increase 43.5 miles (25.5 miles in 2005, 9.6 miles in 2006, and 8.4 miles in 2007) then slow to an increase of 4.4 miles annually over the remainder of the forecast period. Over the 12-year forecast period the average trip length is projected to increase from 411.6 miles in 2004 to 494.5 miles in 2016.

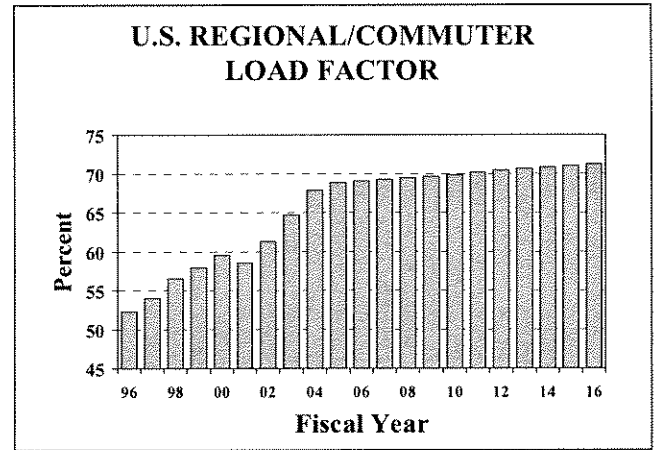


The domestic trip length is forecast to increase 43.5 miles between 2005 and 2007, and then increase an additional 39.8 miles over the remainder of the forecast period, reaching 496.0 miles in 2016. The international trip length is expected to increase 44.9 miles during the first 3 years of the forecast, and then an additional 3.3 miles per year thereafter, going from 376.4 miles in 2004 to 451.3 miles in 2016.

## PASSENGER LOAD FACTOR

The average industry load factor is projected to increase 1.1 points (to 69.0 percent) in 2005, 0.2 points in 2006, and 0.3 points in 2007. For the remainder of the period, the load factor increases at a rate of 0.2 points per year, for a load factor of 71.3 in 2016. It is assumed the regional/commuter industry will continue to emphasize frequency of service and this should keep regional/commuter load factors from reaching the level of the network carriers.

The load factor for domestic travel is forecast to increase from 68.0 percent in 2004 to 71.3 percent in 2016. The international load factor is forecast to increase from 64.9 percent in 2004 to 72.8 percent in 2016.



## REGIONALS/COMMUTERS FORECASTS

The increasing number of aircraft, especially regional jets with ranges beyond 1,000 miles, is creating new opportunities for growth in nontraditional regional/commuter markets. However, the primary role of the regional industry will remain that of feeding traffic to the legacy and low-cost carriers, even as they expand into new markets with longer route segments.

For the mainline air carriers, use of their regional partners is an effective way to maintain a market presence when forced to reduce excess capacity in selected markets. Regional partners can backfill with regional jets and provide service in comparable comfort and speed at a lower cost. The events of September 11<sup>th</sup> heightened the need for the larger commercial air carriers to reduce overall costs and capacity and resulted in the transfer of a large number of markets and routes to their regional partners. This expansion of nontraditional regional/commuter markets is expected to be one of the major drivers of growth during the early years of the forecast.

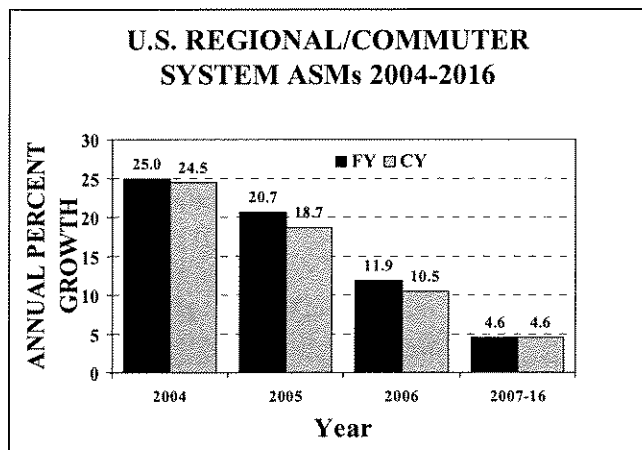
While the transfer of selected routes is expected to continue during the early years of the forecast

period, this phenomenon should diminish considerably during the mid to latter years. Consequently, the rate of growth in traffic will be lower than that experienced in the past.

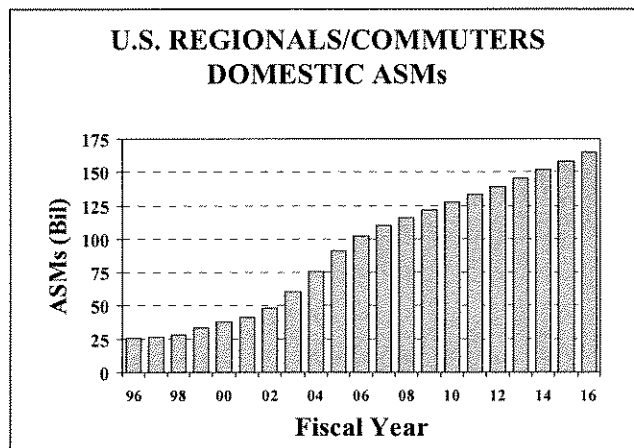
Regional/commuter forecasts of enplanements, ASMs, RPMs, fleet, and hours flown are presented in tabular form in Chapter X, Tables 27 through 30.

## AVAILABLE SEAT MILES

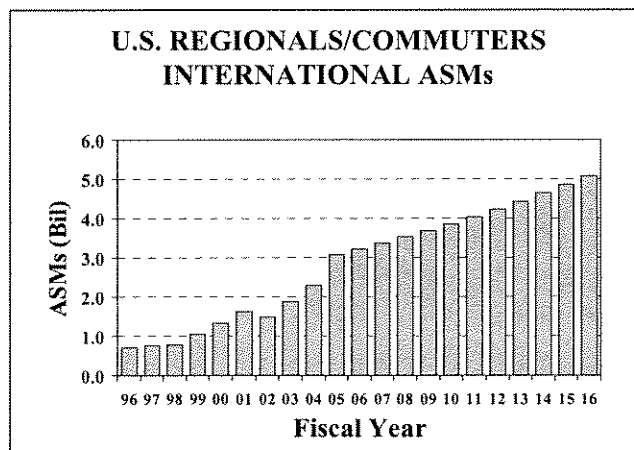
System ASMs are expected to increase 20.7 percent in 2005, 11.9 percent in 2006, and 8.0 percent in 2007. These relatively large increases primarily reflect routes transferred from network carriers along with the delivery of large numbers of regional jet aircraft in the 50-90 seat range. From 2008 through 2016 regional ASMs will increase at an average rate of 4.6 percent annually for a total of 170.2 billion in 2016. Over the 12-year forecast period, ASMs are forecast to increase at an average annual rate of 6.7 percent.



Domestic ASMs are forecast to increase 45.8 percent during the first 3 years of the forecast and total 110.5 billion in 2007. For the period 2008-2016, period, ASMs are expected to increase at an annual rate of 4.6 percent, totaling 165.1 billion in 2016.



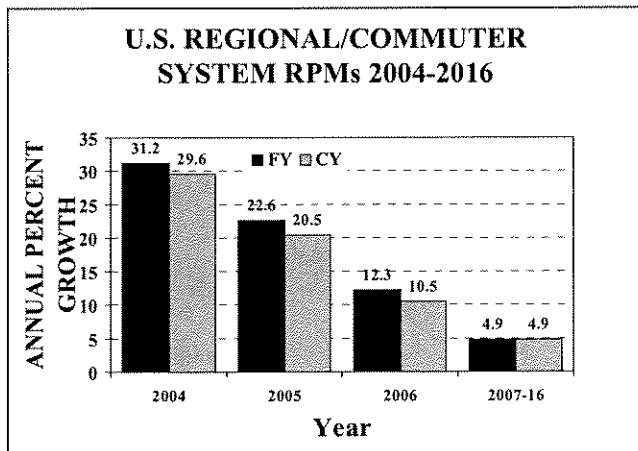
International ASMs are projected to increase 47.4 percent for the first 3 years of the period, for a total of 3.4 billion ASMs in 2007. During the final 9 years of the forecast period, these carriers' ASMs are expected to grow at an average annual rate of 4.7 percent and total 5.1 billion in 2016.



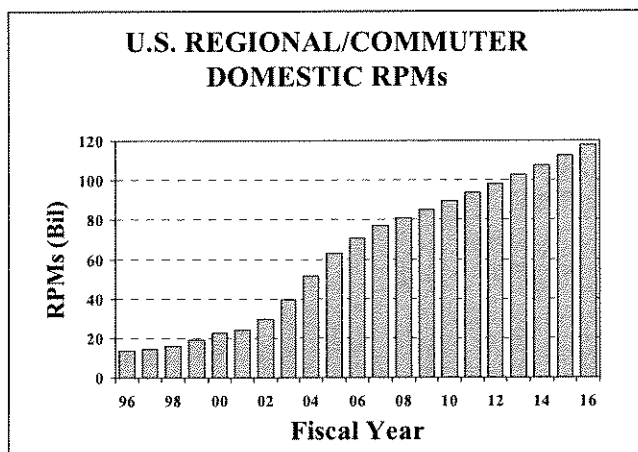
## REVENUE PASSENGER MILES

Regional/commuter RPMs are expected to increase 22.6 percent in 2005 (to 65.1 billion), 12.3 percent in 2006 (to 73.0 billion), and 8.3 percent in 2007 (to 79.1 billion). The high growth rates reflect the longer stage lengths being flown by the large numbers of regional jets entering the fleet during these years. From 2008 through 2016 regional RPMs will increase at an average annual rate of 4.9 percent. Over the 12-year forecast period, the average annual

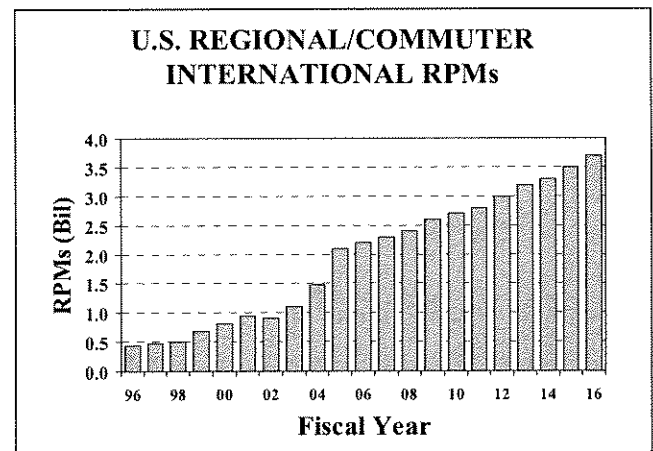
rate of growth in RPMs is 7.1 percent for a total of 121.4 billion in 2016.



Domestic passenger miles are forecast to total 76.8 billion in 2007, a 48.9 percent increase from 2004 levels. Over the latter years of the forecast (2008 through 2016), the average annual growth rate is projected to be 4.9 percent. The average annual increase in RPMs for the 12-year forecast period is 7.1 percent, totaling 117.7 billion in 2016.



International passenger miles are projected to increase 55.0 percent between 2004 and 2007 to 2.3 billion. During the final 9 years of the forecast period, international RPMs are expected to grow at an average annual rate of 5.4 percent for a total 3.7 billion in 2016.

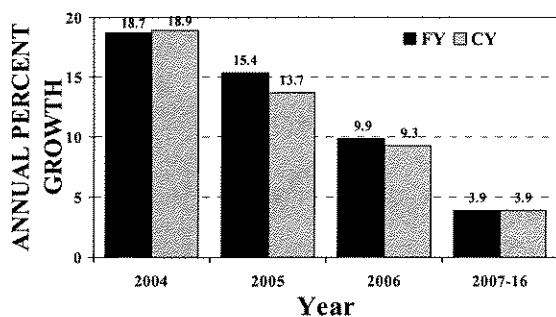


## REVENUE PASSENGER ENPLANEMENTS

Regional/commuter passenger enplanements are projected to increase by 15.4 percent in 2005 (148.9 million), 9.9 percent in 2006 (163.5 million), and 6.3 percent in 2007 (173.8 million). Between 2008 and 2016 enplanements will grow at an average rate of 3.9 percent annually for a total of 245.5 million in 2016. Over the entire 12-year forecast period, system enplanements are forecast to grow 5.5 percent annually. By 2016, regional/commuter carriers are expected to account for 23.4 percent of all commercial air carrier enplanements.

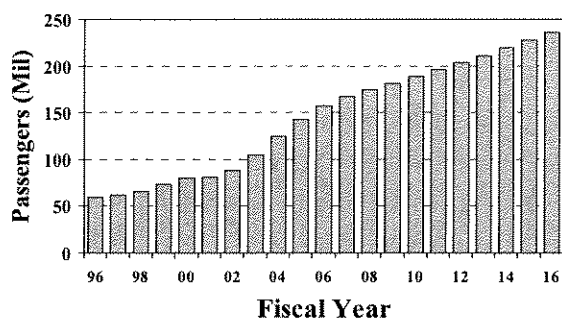
Enplanements are expected to increase at a slower rate than RPMs over the forecast period due to the fact that the average passenger trip increases at an average rate of 6.9 miles per year over the 12-year forecast period.

### U.S. REGIONAL/COMMUTER SYSTEM ENPLANEMENTS 2004-2016



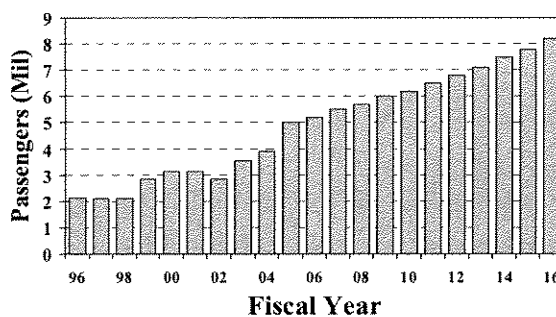
Domestic enplanements are projected to increase 34.7 percent during the first 3 years of the forecast, totaling 168.4 million passengers at the end of this period. Between 2008 and 2016, domestic enplanements will increase at an average annual rate of 3.9 percent. Over the entire 12-year forecast period, enplanements are forecast to increase at an average of 5.5 percent annually, totaling 237.3 million in 2016. By the end of the forecast period, regionals/commuters are expected to transport a quarter (25.3 percent) of all domestic passengers.

### U.S. REGIONAL/COMMUTER DOMESTIC ENPLANEMENTS



International enplanements are projected to increase 38.5 percent by 2007 (to 5.5 million). For the period 2008-2016, international enplanements are projected to increase at an average annual rate of 4.6 percent, totaling 8.2 million in 2016.

### U.S. REGIONAL/COMMUTER INTERNATIONAL ENPLANEMENTS



## REGIONALS/COMMUTERS PASSENGER FLEET

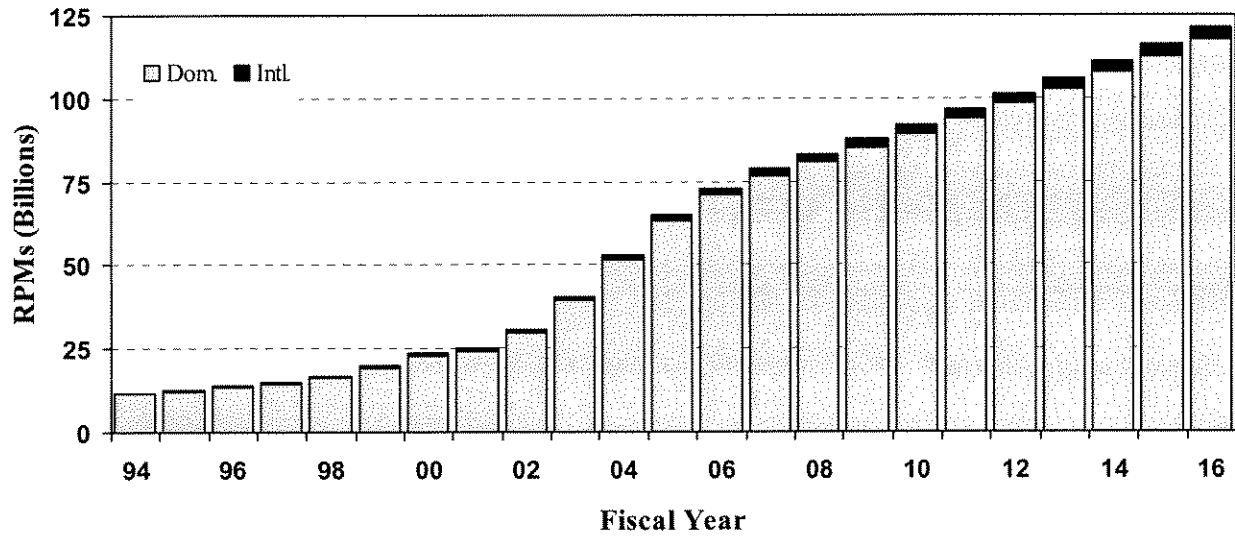
The regional/commuter fleet, once composed primarily of piston and turboprop aircraft, is rapidly moving toward a fleet predominantly made up of regional jet aircraft. Before September 11<sup>th</sup>, regional/commuter carriers deployed regional jet aircraft for the purpose of entering new markets and for supplementing and/or replacing turboprop routes. Post September 11<sup>th</sup>, the regional/commuter carriers are deploying assets on routes traditionally served by mainline carriers in response to the restructuring and downsizing taking place among the larger regional partners. As the regional/commuter carriers began flying more long-haul routes using jet aircraft, many of the shorter-haul routes conventionally flown by turboprop aircraft were discontinued.

In years past, it was believed that the 50-seat regional jet aircraft would be the mainstay of the regional commuter fleet. However, this has changed as a result of the continuing relaxation of scope clauses. While the 50-seat regional jet aircraft remains economically viable, the carriers are now opting to place orders for the larger 70-90 seat regional jet aircraft.

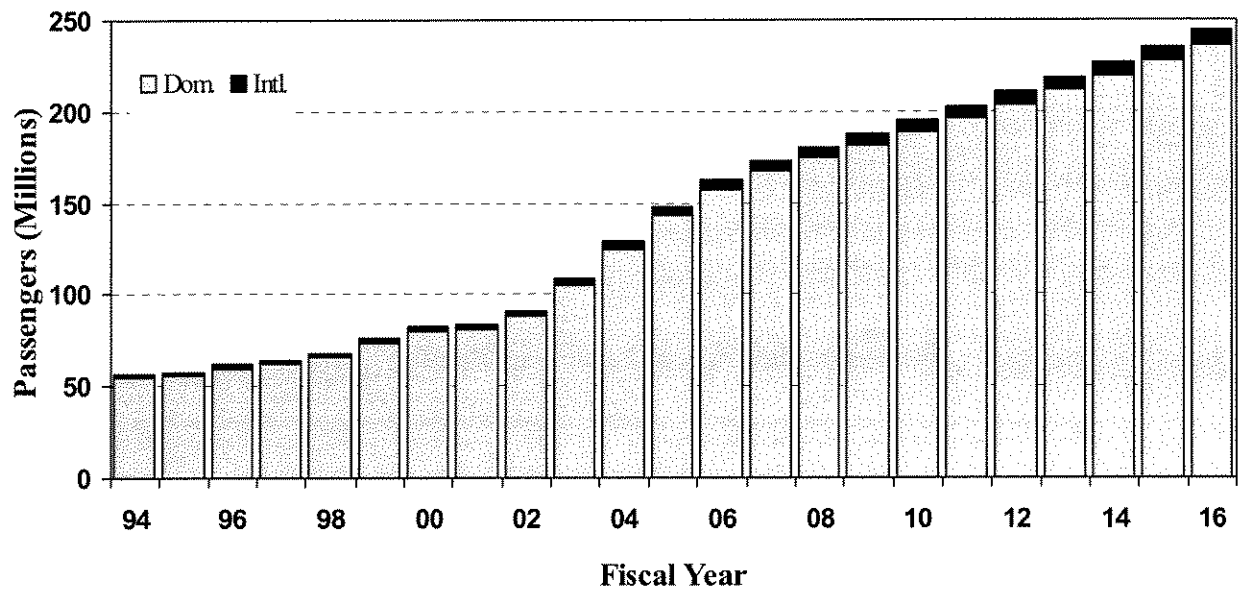


# U.S. REGIONALS/COMMUTERS TRAFFIC FORECASTS

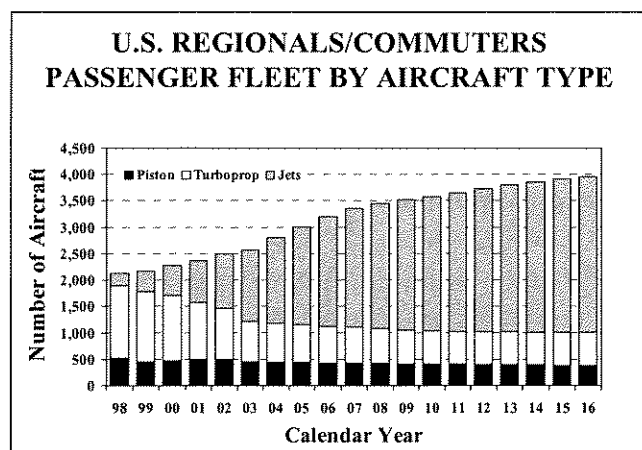
## Scheduled Revenue Passenger Miles



## Scheduled Passenger Enplanements



Over the 12-year forecast period, the regional/commuter passenger fleet is projected to net an average annual increase of 95.8 aircraft, going from 2,812 aircraft in 2004 to 3,961 aircraft in 2016. During the same period, the overall fleet of turboprop aircraft will decrease by 181 aircraft. For the first 3 years of the forecast 9.9 regional jet aircraft will enter the fleet for every turboprop aircraft retired.



Most of the aircraft in the “less than 10 seats” category are operated by Alaskan regional carriers. Regional aircraft in this category once made up the bulk of the fleet--60.9 percent in 1980. In 2004, this category totaled 440 aircraft and accounted for only 15.6 percent of the total regional fleet. Between 2004 and 2016, the number of aircraft in this category is expected to drop to 380 aircraft and account for only 9.6 percent of the fleet in the final year of the forecast. It is assumed that the decline in this category will occur almost entirely among regional airlines operating within the 48 contiguous states.

In 2004, the turboprop aircraft in the 10-40 seat range totaled 642 and accounted for 22.8 percent of the fleet. By 2016, these aircraft are expected to represent 13.3 percent of the fleet and total 525 aircraft. The average net decrease in the fleet is 9.8 aircraft per year. At present, many of the short-haul markets serviced by the turboprop aircraft have disappeared due, in part, to the increased processing times required for ticketing

and clearing security checkpoints. However, the success of regional jets and their acceptance by the traveling public is also a reason for the decline in turboprop aircraft in the 10-40 seat category.

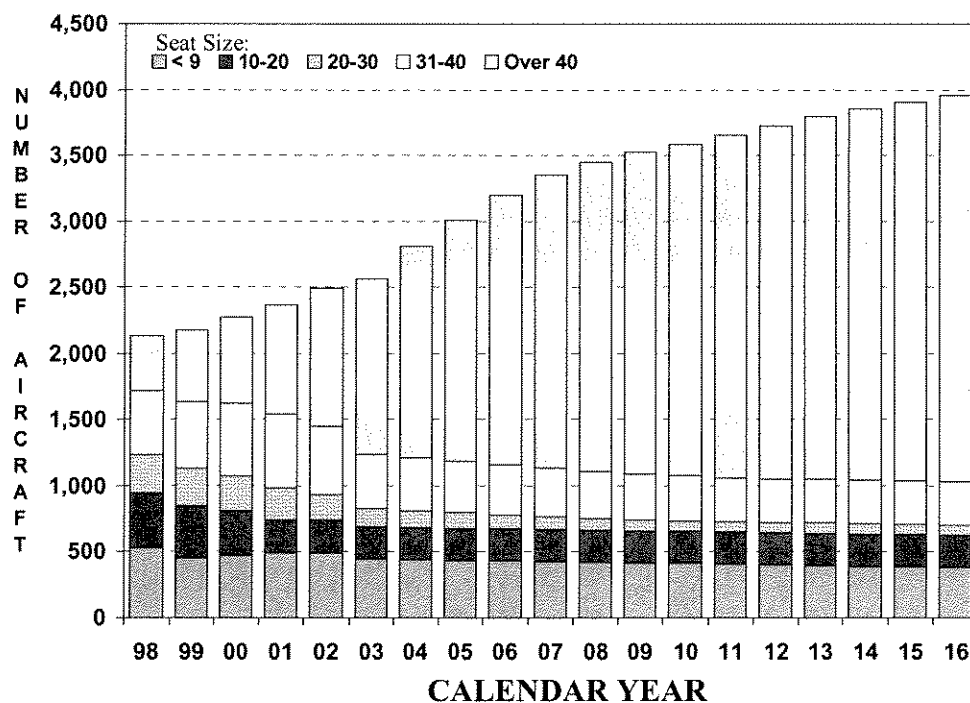
The fleet of turboprop aircraft in the over 40 seats category totaled 100 in 2004. Over the 12-year forecast period, this portion of the fleet is expected to decrease by 4 aircraft and total 96 aircraft in 2016. It is anticipated that some of the regional/commuter carriers will retire some of their ATR aircraft during the early years of the forecast. There are also expected to be deliveries of the Bombardier Q400 during this period as well. It is believed the larger turboprops will remain in the fleet since operators claim them to be economically superior for many of the routes they are used on.

In 2004, turboprop aircraft in the over 40-seat category were 3.6 percent of the fleet. In 2016, these aircraft are forecast to be only 2.4 percent of the fleet.

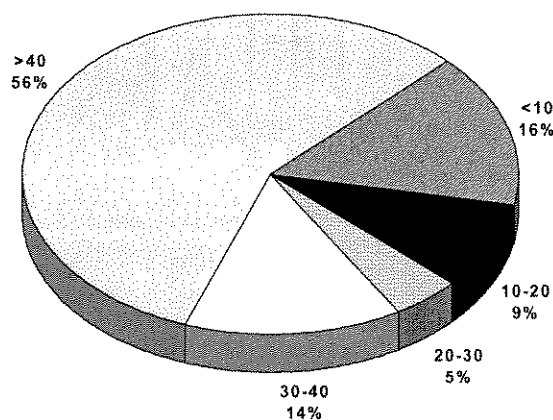
No increase is expected in the 30-40 seat regional jet category over the forecast period. It is anticipated regional/commuter carriers will continue to opt for larger regional jet aircraft. In 2004, this category of aircraft made up 4.6 percent of the fleet. By the end of 2016, regional jet aircraft in this seat category will account for only 3.3 percent of the fleet.

The majority of the increase in the regional/commuter fleet will be from regional jet aircraft in the over 40 (specifically, the 70-90) seat category. In 2004, there were 1,501 jet aircraft that made up 53.4 percent of the fleet. By 2016, it is expected that there will be an additional 1,330 of these aircraft in the fleet, for an average annual increase of 110.8 aircraft per year. Of the 1,330 aircraft that are forecast to enter the fleet over the 12-year period, 55.7 percent are expected to be delivered by the end of 2008. At the end of the forecast period, this category of aircraft are expected to account for 71.5 percent of the regional/commuter fleet.

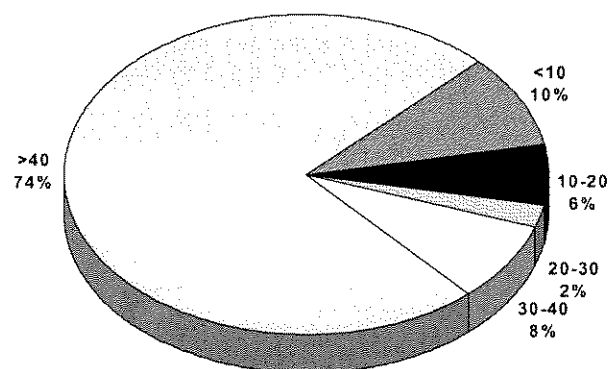
## U.S. REGIONALS/COMMUTERS PASSENGER AIRCRAFT



## PERCENT OF FLEET BY SEAT SIZE



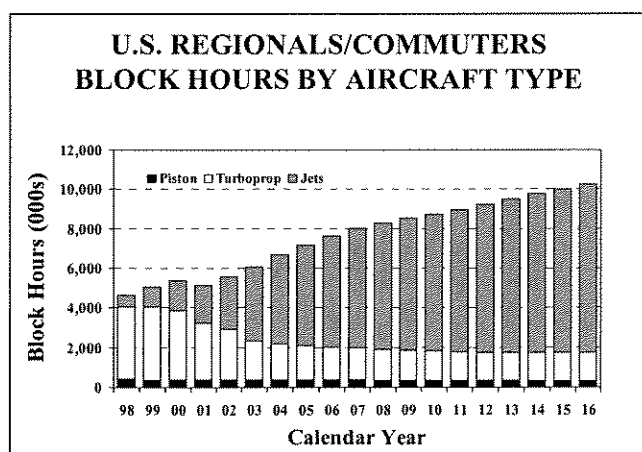
2004



2016

## BLOCK HOURS

Regional/commuter block hours for 2004 are estimated at 6.7 million, an increase of 9.7 percent over 2003. During the forecast period, hours are expected to increase to 7.2 million in 2005 (up 7.5 percent), 7.6 million in 2006 (up 6.4 percent), and 8.0 million (up 4.9 percent) in 2007. During the 12-year forecast period, flight hours are forecast to increase at an average annual rate of 3.6 percent, totaling 10.2 million hours in 2016.



Block hours flown by piston aircraft are forecast to decline from 0.39 million hours in 2004 to 0.32 million hours in 2016, for an average

decrease of 1.7 percent annually. In 2016, piston aircraft are forecast to account for 3.1 percent of the block hours flown by the regionals/commuters, down from 5.9 percent in 2004.

Block hours flown by turboprop aircraft totaled just under 1.8 million in 2004. Hours for this category of aircraft are expected to total 1.4 million in 2016, for an average annual decrease of 1.9 percent per year. The decline in hours during the early part of the forecast period is due to the retirement of turboprop aircraft. In 2004, turboprop aircraft accounted for 26.9 percent of all hours flown by the industry. By 2015, total hours flown by turboprop aircraft is forecast to drop to 13.9 percent.

Block hours for regional jet commuter aircraft totaled 4.5 million in 2004 and were 67.2 percent of the hours flown. By 2016 block hours flown by this category of aircraft are forecast to total 8.5 million and account for 83.0 percent of the hours flown. Regional jet aircraft block hours are expected to increase at an average annual rate of 5.5 percent, but grow at a faster pace during the early years of the forecast due to the larger number of aircraft entering the fleet during this period.